6-17-1998

Farming — Can You Make a Living At It?

Larry Bitney
University of Nebraska-Lincoln

June 17, 1998

Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska -- Lincoln

Farming — Can You Make a Living At It?

Market Report	Yr Ago	4 Wks Ago	6/12/98
Livestock and Products,			
Average Prices for Week Ending			
Slaughter Steers, Ch. 204, 1100-1300 lb Omaha, cwt.	$65.63	$66.25	$64.00
Feeder Steers, Med. Frame, 600-650 lb Dodge City, KS, cwt.	85.00	85.39	80.06
Carcass Price, Ch. 1-3, 550-700 lb Cent. US, Equiv. Index Value, cwt.	96.79	96.93	95.43
Hogs, US 1-2, 220-230 lb Omaha, cwt.	57.40	42.38	42.85
Feeder Pigs, US 1-2, 40-45 lb Omaha, hd.	*	*	*
Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt.	117.50	129.90	113.80
Slaughter Lambs, Ch. & Pr., 115-125 lb Sioux Falls, SD, cwt.	95.25	69.56	104.63
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt.	183.00	129.00	190.00
Crops,			
Cash Truck Prices for Date Shown			
Wheat, No. 1, H.W. Omaha, bu.	4.14	3.33	3.05
Corn, No. 2, Yellow Omaha, bu.	2.66	2.30	2.23
Soybeans, No. 1, Yellow Chicago, bu.	8.44	6.44	6.20
Grain Sorghum, No. 2, Yellow Kansas City, cwt.	4.62	4.06	3.90
Oats, No. 2, Heavy Omaha, bu.	*	*	*
Hay,			
First Day of Week Pile Prices			
Alfalfa, Sm. Square, RFV 150 or better Platte Valley, ton.	100.00	*	*
Alfalfa, Lg. Round, Good Northeast Nebraska, ton.	80.00	85.00	50.00
Prairie, Sm. Square, Good Northeast Nebraska, ton.	72.50	77.50	80.00

* No market.

I've observed that many families are running harder and faster to make ends meet on the farm. Farms that produced living expenses for a family ten years ago are no longer doing so. Many families who found it necessary to supplement farm earnings with an off-farm job in the 1980's have kept that job, and are now struggling again financially. Other families have expanded their farming operations to increase their sales volume, but seem to be reaching their limits of physical and mental energy, and are also struggling.

It should be noted that in the midst of this situation, some families are making a very good living from profitable farming operations. Farm record programs that compile data from individual farms and sort them into "High Profit" and "Low Profit" groups typically show a large range of productivity and profitability among the farming operations included in the program. The Nebraska Farm Business Association (NFBA), which began in 1976, offers a year-end whole farm analysis program to its members, and has been doing group averages since that time. The farms represented in the association tend to be larger than average and the managers may be better than average, due to their participation in a program dedicated to generating record analyses for use in making management decisions. Thus, this group is not a representative sample of Nebraska farms. The size and membership of the group has varied over the years, so the data does not track a given group of farms over a period of years. But, this is the best and only data we have on the actual financial performance of individual farms over a period of years. Data from this source was used to verify the observations of financial stress noted above.

Three items — **Value of Farm Production**, **Net Farm Income** and **Family Living Expenses** were used from the NFBA data and are plotted in the accompanying chart. The earliest years that each of these items became

available are different — Family living expenses in 1977, net farm income in 1979 and value of farm production in 1982. The following discussion concentrates on the 1986-97 period, but data for the earlier years are also shown to help put this period in perspective. The dollar values in the chart are the averages per farm, by years.

Family Living Expenses

In the period from 1977 to 1997, the average of family living expenses per year reported by NFBA participants increased from $12,121 to $33,534. For most of these families, living expenses are paid with after-tax income. With changes in income and self employment tax rates, tax law changes and the ending of investment tax credit, the amount of pre-tax income that must be generated for family living expenses has increased at a faster rate than family living expenses. In 1997 the families paid an average of $8,587 in income and self employment taxes. The total pre-tax income required for family living and taxes was $42,121. The rate of change in family living expenses reported since 1977 has roughly tracked the change in the Consumer Price Index (CPI). The 1977 expense of $12,121, indexed to 1997 using the CPI, equals $32,173, slightly below the group's average expense of $33,534.

Net Farm Income

Families can use net farm income in three ways: 1) For family living expenses, which includes personal savings; 2) For income and self employment taxes; and 3) For increasing farm net worth, which may take the form of principal payments on term debt or cash paid for new investments. If net farm income is less than family living expenses and taxes, farm net worth decreases. Given the need to increase business size to provide for future increases in family living expenses, net farm income needs to exceed the amount required for family living and taxes. How much? It depends on the objectives of the family. One financial consultant has suggested that an amount equal to the requirement for family living and taxes be re-invested in the farm each year. Using this guideline, net farm income should be twice the family living expenses supported by the farm.

The average net farm income of the NFBA participants has been quite variable — from $33,886 in 1979 to a negative $15,087 in 1984, and has oscillated around $50,000 since 1986. These are nominal dollars, and are not adjusted for inflation. If we use linear regression to fit a trend line to the 1986-97 period, we find that it is essentially flat, increasing at the rate of only $28 per year. If we fit a trend line to family living expenses for the same period, they increase at the rate of $1,232 per year.

Net farm income for this group averaged $45,631 in 1997, which would not leave much for re-investment. But, the families averaged $14,026 in net non-farm income, which increases the available funds. Non-farm jobs have become a way of life for many farm families, just as dual wage earners have become a way of life for many urban families.

Freedom to farm payments averaged $15,059 for these families in 1997, equal to about one third of the net farm income. This indicates the magnitude of the adjustment the families face with the end of the payments in 2002.

Value of Farm Production

Value of farm production is a measure of value added or produced on the farm. It is gross farm revenue minus purchased feed and purchased livestock. As can be observed from the chart, the average value of farm production per year fluctuates, but has trended upward. A trend line fitted to the 1986-97 period shows that value of farm production has been trending upward at the rate of $8,029 per year. Thus, these families increased their annual value of production by nearly $90,000 during that period.

Net Farm Income as a % of Value of Farm Production

The Farm Financial Standards Council defines four operating ratios. These are the percentages of gross revenue, or value of farm production, that are used to pay depreciation, interest and other operating costs. The fourth ratio is the percent that is left over as net farm income. The percent of revenue used to pay depreciation and interest has declined for this group since the mid-80's. In 1997, 7.8% went for depreciation and 7.4% went for interest. The "other operating expense" category has increased steadily, reducing the amount left over for net farm income. A trend line was fitted to the ratio of net farm income to value of farm production for the 1986-97 period. It shows that this ratio is trending downward at the rate of 0.8 of a percentage point per year. Using trendline values, it has dropped from 27% in 1986 to 18% in 1997, indicating that 18 cents out of every dollar of value of farm production is currently retained as net, on the average.

Summary

For the farms included in the NFBA database, for the 1986-97 period, value of farm production increased significantly, family living expenses trended upward at roughly the rate of inflation and the trend in net farm income was essentially flat. If we extend the 1986-97 trend lines, family living expenses would equal net farm income in 13 years. Many of the farm businesses would be liquidated before that point, because there would be no funds for re-investment. However, we need to keep in mind that these are averages. Some families are doing better, others are doing worse. Some farms
have been very profitable, and will no doubt remain profitable, for a variety of reasons. Others are experiencing financial stress.

What can individuals do to change these trends? This is the topic for another article, but briefly — exercise cost control while maintaining output, enhance the value of products sold and explore alternative product mixes, are possible courses of action.

Larry Bitney, (402) 472-2047
Professor and Extension Farm Management Specialist

Subscription Renewal Time!!!

It is time to renew your ***Cornhusker Economics*** for the coming year July 1998 - June 1999. Attached is a renewal form to fill out and return with your check. Please make the check payable to the **University of Nebraska**. If you have any questions, call Nancy Pritchett at (402) 472-1789.